

**Parmelia Cladonia, a beautiful northern lichen,
found on Catskill summits**

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Receipt from friends who sent lichens from the Adirondacks, the Green Mountains of Vermont and from high summits in Maine last summer, of a very beautiful foliose species, identified for me by Mrs. Gladys P. Anderson as *Parmelia Cladonia*, started the writer on a search for the plant within the range of the Torrey Botanical Club. He has been successful in finding it in four stations on higher summits in the Catskills. Mrs. Anderson has found it on two others, so that it seems probable that it may be found on many Catskills summits above 3500 feet, or perhaps lower where conditions are favorable.

When specimens from the Great Rangé in the Adirondacks, collected by A. T. Shorey; of Brooklyn; from Jay Peak, in the Green Mountains, collected by Mrs. Laura Woodward Abbott, of Upper Montclair, N. J.; and from northern Maine, by George F. Dillman, of New York, sent to the writer, were referred to Mrs. Anderson, she identified them, and remarked that the species was reported about 25 years ago, by Mrs. Carolyn W. Harris, of Brooklyn, from Panther Mt. in the Catskills, although the specimen had not been preserved, and Mrs. Harris' report was the only one recorded for our range.

A climb of Peekamoose Mountain, in the southern Catskills, last September, with Louis W. Anderson, of Elizabeth, N. J., resulted in the discovery of *Parmelia Cladonia* in fairly ample quantity near the summit, from 3500 to 3860 feet. Another expedition with Mr. Anderson to Big Indian Mountain, 3750 feet, last November, disclosed it at 3500 feet on that summit, in great quantity on dead and living firs in a high swamp.

An opportunity to check Mrs. Harris' report, for Panther Mountain, was afforded on May 28, in a climb of that peak, 3750 feet, via Giant Ledge, 3250 feet. Guided by the directions of C. T. Andrews, proprietor of the Valley View Cottage in Oliverea, an easy ascent was made up a long hogback south of Seymour Brook, a tributary of Esopus Creek, to the rock slide on the west slope of the summit of Giant Ledge, where the sandstone slabs were found to be covered with many *Cladoniae*.

Mrs. Anderson also found on this mountain several forms of *Parmelia physodes*, *Pyxine sorediata*, and *Cetraria Oakesiana* in fruit, which usually occurs only in the north. There was a little of *Parmelia Cladonia*, mixed, as usual, with *Evernia thamnodes* and *furfuracea* var. *ceratea* and *Parmelia physodes*.

A descent to the col north of Giant Ledge, and a climb of 750 feet up the cliffs and steep slopes, to the summit of Panther, 3750 feet, disclosed plenty of *Parmelia Cladonia*, within the last 100 feet of altitude, especially in a shallow wet basin, with much dead fir evidently overturned by ice storms. If this was Mrs. Harris' station, it is certainly still there. There is another summit, a mile north, 200 feet lower, which was not reached, where it may also occur.

Mrs. Anderson found this lichen in small quantity on North Mountain, east of Haines Falls, last autumn, and she thinks it occurs on Wittenberg, which is probable as that summit is 3800 feet. It seems likely that it may occur on Slide, 4200; on the Blackheads, nearly 4,000; on Hunter, 4025 feet; on the wild Plateau Mountain, 3900 feet; and probably on some others.

Parmelia Cladonia has had other names, the present being the name given by Dr. Zahlbruckner, which must presumably be accepted. Tuckerman called it, or a phase of it, *Evernia furfuracea*, var. *Cladonia*, and it certainly looks like an *Evernia*. As found in the Catskills, it occurs with an unquestionable *Evernia*, *E. thamnodes*, and with another plant, which seems to fit *Evernia furfuracea* var. *ceratea*, as described by R. Heber Howe, Jr., in a paper on "The Genus *Evernia* as Represented in North and Middle America," *Botanical Gazette*, 51: 431-442, June, 1911. As the writer understands *Parmelia Cladonia*, it is densely intertangled, glabrous gray above, and more or less solid black on the channelled under side. In the Catskill stations it occurs from tiny plants $\frac{1}{4}$ inch long, on living firs, to masses six or eight inches long and two or three in diameter, on dying or dead trees, especially in the Big Indian Mt. locality, the amplest found by the writer in the Catskills. This station is not difficult to reach, by automobile and on foot. One may drive via Kingston and Arkville, then by dirt road south to Seager and follow the yellow blazed state trail to the west shoulder of Big Indian, near the height of land at about 3400 feet before dropping off south into the valley of Biscuit Creek. Turn west,

right, toward a dense mass of fir, and there it will be found. Or one can drive via Middletown, Ellenville, Wawarsing, and Route 55 to Curry, thence north on a dirt road to the West Branch of Neversink Creek, along it to the south end of the yellow trail beyond Frost Valley and on that trail via Biscuit Creek to the west shoulder of Big Indian Mountain, where turn left to the fir swamp.

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